

ABSTRACT

A segmented hook and loop type fastener accommodates molding contours. Each segment may be surrounded by a gasket barrier, or covered by another sort of cover, or left unprotected. The fastener component is a plurality of fastening segments. Carried on the fastening face of a base member are a plurality of fastening elements, either hook-type or loop-type. Located between and joining each adjacent pair of fastening segments is a flexible neck that is narrower than the fastening segment. The flexible neck region is typically flexible around two or three orthogonal axes. Each segment may have a barrier for use during an operation to incorporate the fastener into a molded body. The barrier would prevent any liquid foaming material from contacting the fastening elements if the fastener is placed in the mold with the fastening elements pressed against the wall of the mold. The cover may be enveloping or space filling. Several different types of apparatus and methods for fabricating such a fastener are also disclosed. A plurality of mold plates include a fastener forming zone, having similar arcuate edges. The fastener forming zone further comprises fastening element mold cavities intersecting these edges and one face of the mold plate, the mold cavities being arranged into a plurality of segment forming regions. Circumscribing each of the segment forming regions, is a gasket mold cavity; and between each adjacent pair of segment forming regions, is a hinge forming region. The mold plates are arranged to form a cylindrical mold wheel having a circular surface formed by the arcuate edges of the mold plates such that the segment forming regions are spaced apart circumferentially around the cylindrical surface. The apparatus further comprises an extruder having a die whose surface is disposed close to the cylindrical surface.